BID NO. R050405

REQUEST FOR BIDS

CITY OF MOUNTAIN VIEW
Purchasing Division
500 Castro St/PO Box 7540
Mountain View CA 94039-7540
Ph 650-903-6324 Fax 650-968-5472

Bid Due Date: 9/23/04
Bid Due Time: 2:00 PM

Vendor Name _____
Vendor Address _____
_____
_____

Item	Qty	Unit	Description	Unit Price	Amount
0001	1	LOT	Furnish and install a 2,000 gal above ground fuel tank, two fuel dispensers and one fuel management system, including concrete pad, concrete driveway, oil/water separator catch basin and 24'x34' steel canopy. Remove and dispose of existing underground tank, piping and dispenser facilities. Backfill pits and provide blacktop to match adjacent area, as per attached Specifications for Fuel Tank and Fuel Dispenser Facilities at Shoreline Golf Course including A1-A7 drawings. Required Site Review is scheduled for 10:00 AM, Thursday, Sept. 9, 2004 beginning at Shoreline Golf Maintenance Area, 2608 North Shoreline Blvd, Mountain View, CA 94043. Contact: David Huang	$_____	$_____

Payment Terms: Net 30 or better _____
Guaranteed Delivery of ____ business days ARO

Signature Accepts City's Attached Terms & Conditions

Subtotal	$ _____
8.25% Sales Tax	$ _____
(Pre-pay & Add) Shipping	$ _____
GRAND TOTAL	$ _____

_____
Signature of Company Officer

_____
Printed Name of Company Officer

E-mail address _____
Phone Number _____
FAX Number _____

CITY OF MOUNTAIN VIEW

REQUEST FOR BIDS NO. R050405
INSTRUCTIONS FOR SUBMITTING BIDS

1. **Type of Reply Requested:**

   ☐ Request for Bid, Informal (fax bids are acceptable)
   ☒ Request for Bid, Formal, Public Opening (no faxes)

2. **Bids Due:** 2:00 PM THURSDAY, SEPTEMBER 23, 2004

3. **Reply To:**

   City of Mountain View
   Attention: Chris Hartje, Supervising Buyer
   500 Castro Street
   Mountain View, CA 94041

   or

   P.O. Box 7540
   Mountain View, CA 94039-7540

   Phone: (650) 903-6324 Fax: (650) 968-5472

   Questions: Call the person named above for questions regarding this bidding process, or call David Huang, Facilities Engineer at 650-903-6267 for questions regarding the specifications and/or requirements.

4. **Reply Format:** The entire bid form, including all attachments, must be returned by the bid due date to the above address. The envelope returning the bid shall have the bid number and the due date. By signing our bid form, you are agreeing to the City's Terms and Conditions. (**Please note insurance requirements on Pages 5 and 6.**) Once notified of bid award, the Vendor has five days to send the correct certificate of insurance. Lack of a timely response is grounds for rejection of the Vendor's bid.

5. **Prebid Conference:** The prebid conference is mandatory (if required and noted on the bid form) and is for the City's protection, to ensure that vendors know the work required. The Purchasing Agent may waive this requirement if the Vendor is familiar with the work requirements and asks the City for permission to miss the prebid conference.

6. **Deviations from Bid Specifications:** If there are any deviations from the brands and/or specifications, the Vendor MUST note such differences, brand names,

model numbers and attach brochures and a complete description of the goods or services bid. The burden of showing the equivalency is on the Vendor.

7. **Bid Award:** The City reserves the right to reject any and all bids, or to waive any errors, discrepancies or irregularities. The bid will be awarded at the discretion of the City Manager (formal bids) or Purchasing Agent (all other bids) on an item-by-item basis, or in any fashion that best meets the needs of the City. All blanks for unit prices must be completed.

TERMS AND CONDITIONS

1. **Payment Terms:** The City's payment terms are, at a minimum, net thirty (30) days after acceptance of service or delivery of goods. The Vendor's invoice must easily match the unit prices listed in this bid and must include the Vendor's Social Security number or Federal Tax I.D. number. Vendors may offer discounted payment terms and those should be listed on the Vendor's response.

2. **Time of Delivery/Completion:** Time is of the essence on this purchase order. The Vendor shall deliver all of the goods or complete all of the services called for under this proposal within the number of working/calendar days or by the date specified for completion in this proposal, unless the delays are caused by the City or by acts of God. Failure to deliver on time shall be grounds for termination of this Agreement or invoke "Liquidated Damages" if required below.

3. **Freight Charges:** All prices bid shall include all freight costs and ownership transfers to the City at the City's location and are F.O.B. destination to the designated locations. Freight, if quoted separately, shall be prepaid and added to the invoice with ownership transferring to the City when delivery is completed to the City's location.

4. **Liquidated Damages:**

☒ Required ☐ Not Required

If required, it is agreed by the Vendor that if the goods or services are not delivered complete, as called for in this proposal, damages will be sustained by the City, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the City will sustain in the event of and by reason of such delay; and it is, therefore, agreed that the Vendor will pay to the City the sum of Three Hundred Fifty Dollars ($350) per day for each and every calendar day's delay in finishing the work in excess of the number of working or calendar days prescribed or in excess of the date specified for completion or delivery of the goods or services, whichever is applicable in this Proposal; and the Vendor agrees to pay said liquidated damages as herein provided; and in case the

same are not paid, agrees that the City may deduct the amount thereof from any moneys due or that may become due the Vendor under this proposal.

Partial payments paid to the Vendor after the scheduled completion dates shall not be constituted as a waiver of the City's right to assess liquidated damages.

5. **Firm Prices:** All quotes will be held firm for a minimum of thirty (30) days after the bid due date listed above to allow adequate time for the City to consider each bid and make an award. All blanks for unit price and total price shall be completed. Any discrepancy between the unit price and the extended or total price shall be determined by taking the lower price. Upon receipt of this bid by the City, the Vendor shall be presumed to be thoroughly familiar with all the aspects of this proposal, including installation sites and all specifications and requirements of this proposal. The failure or omission to examine any location, equipment, form, instrument or document shall in no way relieve Vendor from any obligation in respect to this bid.

6. **Warranty:** The delivered or installed goods, equipment or services shall be warranted to be free from defects in material and workmanship. The warranty period shall begin upon acceptance by the City. As a minimum, all goods, equipment and services shall be warranted to operate satisfactorily in accordance with the requirements of these specifications, representations of the Vendor and the published specifications of the manufacturer(s) for a period of at least one (1) year. Any defective goods, equipment or services shall be replaced or repaired quickly at the City's location during the warranty period at no expense to the City. If repairs cannot be made at the City's location, the Vendor shall transport/ship the equipment to a repair facility. All repairs must be completed and the equipment returned to the City within seventy-two (72) hours of a call for service. If the Vendor fails to have the equipment repaired within seventy-two (72) hours, the Vendor shall provide an equal "loaner" piece of equipment until the City's equipment is returned in operating condition.

7. **Prevailing Wages:**

☒ Required ☐ Not Required

If required, notice is hereby given that the latest general prevailing rate of per diem wages, as determined by the Director or the Department of Industrial Relations, State of California, is to be paid to the various craftsmen and laborers employed in the construction of this project and is made a part of the specifications and contract for this project.

Reference is hereby made to copies of the general rate of per diem wages as determined by the Director of the Department of Industrial Relations on file in the

Department of Public Works, City of Mountain View, which are available to any interested party.

For failure to pay the prevailing wages, the contractor shall forfeit, as a penalty, to the City, Fifty Dollars ($50) for each workman for each calendar day or portion thereof who is paid less than the stipulated prevailing wage for work done under this contract, in violation of the provisions of the Labor Code, Sections 1770 to 1780, inclusive. In addition to said penalty, the contractor, or subcontractor, shall pay to each worker the difference between the prevailing wage and the amount paid to said worker for each calendar day for which said worker was paid less than the prevailing wage.

8. **MSDS:** General Industrial Safety Order 5195 requires Material Safety Data Sheets (MSDS) be supplied, for all applicable items, with the initial delivery.

9. **Licensed Contractor:** All contractors bidding on work requiring a State of California Contractor's License must state under penalty of perjury that they are a licensed contractor by listing their license number, date of expiration, type of license and description of that type of license.

Contractor's License No.: _____
Date of Expiration: _____
Type of License: _____
Description of License: _____

10. **Ownership and Collusion—Financial Interest by City Employees:** The Vendor certifies, by signing this bid, that he/she has not, directly or indirectly, been collusive with any other vendor or anyone else interested in this bid. Additionally, the Vendor stipulates that no City officer or employee shall be financially interested, either directly or indirectly, in any contract, sale, purchase or lease to which the City is a party, and the Vendor stipulates that no City officer or employee has greater than five percent (5%) ownership in this company, as per Section 706 of the City of Mountain View Charter.

11. **Assignment:** Any purchase order issued as a result of this bid may not be assigned without written consent of the City.

12. **Termination:** Any purchase order issued as a result of this bid may be terminated by the City at any time with ten (10) days' written notice. The City will only pay for any goods or services ordered and accepted by the City. Any payments made in advance will be returned to the City on a prorated basis with the City only paying for those goods or services actually provided.

13. **Funding Out Clause:** Any purchase order issued as a result of this bid may be terminated every June 30 based upon the City Council not funding the purchase of goods or services to be provided in this bid after each July 1.

14. **Nondiscrimination:** The Vendor shall afford equal employment opportunities for all persons without discrimination because of race, color, religion, sex, sexual orientation, political affiliation, national origin, ancestry, age, marital status or physical or mental disability.

15. **Applicable Laws and Attorneys' Fees:** This Agreement shall be construed and enforced pursuant to the laws of the State of California. Should any legal action be brought by a party for breach of this Agreement or to enforce any provision herein, the prevailing party of such action shall be entitled to reasonable attorneys' fees, court costs and such other costs as may be fixed by the court. Reasonable attorneys' fees of the City Attorney's Office, if private counsel is not used, shall be based on comparable fees of private attorneys practicing in Santa Clara County.

16. **Subcontractors:** The City prefers a proposal with a single or primary vendor. If you propose a multi-vendor or subcontracted approach, clearly identify the responsibilities of each party and the assurances of performance you offer. The Vendor is the prime contractor and is solely responsible for all of the Vendor's subcontractors.

17. **Insurance:**

    a. Commercial General Liability/Automobile Liability Insurance: The Vendor shall obtain Commercial General Liability insurance and Automobile Liability insurance in the amount of One Million Dollars ($1,000,000) per occurrence. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this contract or the general aggregate limit shall be twice the required occurrence limit. The Vendor's insurance coverage shall be written on an occurrence basis.

    b. Professional Liability Insurance:

    ☐ Required ☒ Not Required

    If required, the Vendor shall obtain Professional Liability insurance in the amount of One Million Dollars ($1,000,000) per occurrence. Professional Liability insurance must be maintained and evidence of insurance shall be provided to the City for at least three (3) years after completion of work.

    c. Workers' Compensation Insurance: The Vendor shall obtain statutory Workers' Compensation insurance and Employer's Liability insurance in the amount of One Million Dollars ($1,000,000) per accident.

d. Acceptability of Insurers: Insurance is to be placed with insurers with a current *Best Rating* of A:VII unless otherwise acceptable to the City.

e. Verification of Coverage: Insurance, deductibles or self-insurance retentions shall be subject to the City's approval. Original Certificates of Insurance with endorsements shall be received and approved by the City before work commences, and insurance must be in effect for the duration of the contract. The absence of insurance or a reduction of stated limits shall cause all work on the project to cease. Any delays shall not increase costs to the City or increase the duration of the project.

f. Other Insurance Provisions:

(1) The City of Mountain View, its officers, officials, employees and volunteers are to be covered as additional insured by Endorsement CG 20 10 11 85 for Commercial General and Automobile Liability coverage.

(2) For any claims related to this project, the Vendor's insurance coverage shall be primary and any insurance or self-insurance maintained by the City, its officers, officials, employees and volunteers shall not contribute to it.

(3) Each insurance policy required shall be endorsed that a thirty (30) day notice be given to the City in the event of cancellation or modification to the stipulated insurance coverage.

(4) In the event the Vendor employs subcontractors as part of the work covered by this Agreement, it shall be the responsibility of the Vendor to ensure that all subcontractors comply with the same insurance requirements that are stated in this Agreement.

18. **Hold Harmless:** The Vendor hereby agrees to and shall indemnify, defend and hold the City, its officers, agents and employees harmless from any liability for damage or claims for damage for personal injury, including death and/or property damage, caused by negligent acts, errors or omissions in performance of professional services under this Agreement by the Vendor or the Vendor's contractors, subcontractors, agents or employees' operations under this Agreement. The City shall cooperate reasonably in the defense of any action, and the Vendor shall employ competent counsel, reasonably acceptable to the City Attorney.

19. **Reliance Upon Professional Skill:** It is mutually agreed by the parties that the City is relying upon the professional skill of the Vendor, and the Vendor

represents to the City that its work shall conform to generally recognized professional standards in the industry. Acceptance of the Vendor's work by the City does not operate as a release of the Vendor's said representation.

20. **Extending Contract Pricing:** The successful Vendor will extend bid pricing as quoted herein to other political subdivisions (i.e., cities, counties, school districts, etc.).

☐ Yes ☐ No

If prices bid herein are offered to other political subdivisions, additional delivery charges, if any, must be negotiated between the political subdivision and the Vendor.

21. **Entire Agreement:** This Agreement contains the entire understanding between the parties with respect to the subject matter herein. There are no representations, agreements or understandings (whether oral or written) between or among the parties relating to the subject matter of this Agreement which are not fully expressed herein. If the attachments or exhibits to this Agreement, if any, are inconsistent with this Agreement, this Agreement shall control.

22. **Signatures:** The undersigned understands and agrees that the conditions set forth in the instructions to vendors, the terms and conditions and the specifications, together with the bid and any other documents submitted in response to the foregoing, shall form a part of and be construed with the purchase order/contract.

VENDOR:

Company Name	Street Address of Company
Signature of Officer	City, State, Zip
Printed Name of Officer	Telephone No./Fax No.
Title of Officer	Federal I.D. Tax Number

AS-9^ (QS Long)
(Rev. 3/10/04)

R050405
8-31-04

Bid Schedule
Fuel Tank and Fuel Dispenser Facility
Shoreline Golf Course
2608 North Shoreline Boulevard
Mountain View, CA 94043

No.	Qty	U/M	Description	Unit price	Ext Price
1	1	LOT	Split compartment gas/diesel vault tank Make & Model quoted: _____		
2	1	LOT	Concrete pad, 2 hr rated, guard posts		
3	1	LOT	Fuel dispensers , GasBoy Astra or equal: Make & Model quoted: _____		
4	1	LOT	Fuel management system w/software		
5	1	LOT	Electrical for pumps, Canopy lighting, Communication conduit		
6	1	LOT	Piping /plumbing/ drainage connection		
7	1	LOT	Access ladder		
8	1	JOB	Removal of the existing fuel facilities		
9	1	JOB	Soil testing for contamination Soil testing for compaction		
10	1	LOT	Steel canopy		
12	1	LOT	Concrete driveway		
13	1	LOT	Oil/water separator		
14	1	LOT	Fire sprinkler		
15	20	TON	Clean soil removal		
16			Others		
			Total Base Bid		
			Alternate Items		
A1	1	LOT	Delete item 3 and 4 and provide an alternate fuel dispensing package Make & Model quoted: _____		
A2	20	TON	Contaminated soil removal to Newby Island		
A3	1	TON	Contaminated soil removal unit price		
A4	1	TON	Clean soil removal unit price		

R050405
8-31-04

SPECIFICATIONS
Fuel Tank and Fuel Dispenser Facility
Shoreline Golf Course
2608 North Shoreline Boulevard
Mountain View, CA 94043

PROJECT SUMMARY

Furnish labor and material to install a 2,000-gallon; two-compartment, aboveground vault tank; two fuel dispensers; and one fuel management system. The tank should be mounted on a new 6" thick concrete pad with 4" concrete filled guard posts and steel access ladder. Provide a concrete driveway, an oil/water separator catch basin, and a 24'x34' powder coated steel canopy. Remove and dispose the existing underground tank, piping and dispenser facilities. Backfill the pits and provide blacktop to match adjacent surfaces. Provide soil testing and unit price for the removal of hazardous waste soil.

GENERAL PROVISIONS

1. PREVAILING WAGE REQUIREMENTS

   This is a prevailing wage project. Department of Industry prevailing wage requirements will apply to this project.

2. RESPONSIBILITIES OF THE CONTRACTOR

   The City assumes no responsibility for loss of or damage to materials or equipment owned or operated by the contractor, his agents or employees. All work damaged due to vandalism or any other cause prior to acceptance of the work by the City shall be repaired or replaced by the contractor at the contractor's own expense.

   The contractor shall comply with all applicable State and local laws, ordinances, codes and regulations. All safety orders, rules and recommendations of the Division of Industrial Relations of the State of California, applicable to all the work performed under this contract, shall be obeyed and enforced by the contractor. The contractor shall be solely responsible for any and all injuries to individuals or properties resulting directly or indirectly from the contractor's

performance of the work, and the contractor agrees to indemnify and hold the City free and harmless from and against any and all liabilities, expenses, claims, costs, suits and damages arising out of the negligence or on the part of the contractor.

3. WORKING HOURS

The regular working hours for the City are between 8:00 a.m. and 4:00 p.m. from Monday to Friday. Work on weekends maybe allowed with prior approval.

4. SITE APPEARANCE

The contractor shall maintain a neat appearance to the work site throughout the construction period. When practical, broken concrete, dirt and debris generated by the construction shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed of daily or at the direction of the Facilities Project Manager.

If the contractor damages any improvements, the contractor shall repair or replace the damaged improvements to the satisfaction of the Facilities Project Manager. The repair or replacement work shall be of equal or greater quality and in appearance to prior condition. The repair or replacement method used shall be approved by the Facilities Project Manager.

If immediate repair cannot be made on damaged sewer or water service, a City emergency crew shall perform the repair, and the cost of the repair shall be charged to the contractor.

The contractor shall solely be responsible for and bear the costs of repairing or replacing damaged improvements. Excess materials generated from the repair or replacement work shall be disposed of off-site by the contractor at the contractor's own expense.

5. HAZARDOUS WASTE

All work shall be conducted in a manner that prevent the release of hazardous materials, hazardous waste, polluted water, sediments, and other construction-related debris to the storm drain system or watercourses.

6. DISPOSAL OF MATERIALS

The removed equipment is to be disposed of off-site in a legal manner. The contractor shall not stockpile debris, rubbish, garbage, excess materials or other unwanted materials on the sidewalk or on the street. All demolition rubble,

debris, slurry, dirt, trees, shrubs, vegetation and other excess materials resulting from the contractor's operations shall be disposed of off-site in a safe and legal manner at the contractor's own expense. All rubble, debris or other excess materials must be removed at the end of each workday. Washing of excess materials into the storm drain is prohibited.

Payment for transportation and disposal of excess materials and removed equipment shall be considered as included in the contract, and no additional compensation shall be made therefore.

If contaminated groundwater is encountered and removed during the project, the groundwater must be either hauled off-site and disposed in a legal manner, or discharged to the City's sanitary sewer. Discharge to the sanitary sewer requires a permit from the City's Fire and Environmental Protection Division.

This contract includes testing of at least 4 samples of the potential contaminated soil around existing tanks.

Any contaminated soil or material shall be handle/treated/disposed in compliance with California Code of Regulations, Title 23, Santa Clara Health Department and other regulatory agencies. The contractor shall submit a proposal related to this cost within 7 days after the completion of the test result.

7. SITE CLEANUP

Site cleanup shall conform to the provisions in Section 4-05, "Final Cleanup," of the Standard Provisions and as specified herein.

If the contractor fails to perform the final cleanup work as specified, the City will withhold the final payment until the contractor complies with the requirements. If the final cleanup is deemed unsatisfactory by the Facilities Project Manager, the contractor shall remedy the work within two (2) working days after receipt of rejection notice from the City. If the contractor fails to remedy the work as directed, the City may, at its own option, hire a third party to perform the work and deduct the cost of the clean-up work from the final payment due the contractor.

8. INSURANCE REQUIREMENTS

Follow the requirements from the Purchasing Division under "Instruction for Submitting Bids."

9. CHANGE ORDER

Contractor shall secure prior approval from the Facilities Project Manager and Purchasing Division for any change orders which may impact project price and schedule. The contractor agrees to waive his/her rights of any claim if any out-of-scope work is carried out without an approved change order signed by the Facilities Manager of the City. If the owner initiates a change order, a detailed cost breakdown proposal shall be submitted within six (6) calendar days for owner's approval. Contractor shall verify all code requirements and include these requirements in the total price. The changes, if any, caused by Building Code requirements will not qualify for a cost change order.

When field changes, clarifications or other information regarding changes to the contractor's work become necessary, a letter will be issued to the contractor notifying the contractor of the changes, clarifications or such other information as the case may be. This letter will instruct the contractor whether or not to proceed with the work and will request an itemized quotation for any applicable change to the contract scope of work.

The contractor's quotation will be analyzed for correctness. After the review and analysis of the quotation by the Facilities Project Manager, it will be incorporated into the appropriate change estimate. Upon City's approval, a contract change order will be issued. Prompt response and submission of the itemized quotation, together with detailed quantity breakdowns of the work and subcontractor and supplier backups, will expedite approval of all changes. The contractor must reply to the City's letter within seven (7) calendar days of its issuance. Failure by the contractor to timely respond to this letter will cause the City to apply a unilateral decision on the cost of the change. Incomplete quotations or insufficient supporting documentation will cause the quotations to be returned for revision and resubmission.

SPECIAL PROVISIONS

1. EXAMINATIONS AND INVESTIGATION BY CONTRACTOR

Contractors are advised that not all existing surface features or underground facilities are shown on the plans and that their locations, as delineated on the drawings, are generally schematic in nature.

Prior to submitting a bid, the contractors shall examine all documents relating to this project and visit the job site to ascertain the nature of the work and the character of the job site. The contractors shall become familiar with the contractual requirements, project limitations, various aspects of the work, physical conditions and surroundings of the job site.

The contractors shall include in their bids a sum sufficient to cover the costs of doing the work under the existing site conditions and project requirements. By submitting a bid for the project, the contractor declares that he or she has thoroughly investigated the job site, examined all related project documents and is familiar and satisfied with the nature, character and condition of the project site, contractual requirements, project limitations and the various aspects of this project. The City will not consider any claims for compensation whatsoever on account of the contractors' failure to fully investigate and examine the project requirements and job site conditions as required above.

2. CONSTRUCTION SCHEDULE

The construction for the new tank and fuel facilities shall be completed within 60 days from approval of the purchase order for each phase. The removal of the existing underground tank to be completed within 90 days. Removal of the existing fuel facility shall not be started until the new fuel facility is tested and operational.

3. LIQUIDATED DAMAGES

Pursuant to California Government Code Section 53069.85, the contractor agrees to forfeit and pay to the City the sum of Five Hundred Dollars ($500) per day for each calendar day completion of the project is delayed beyond the due date. The City may withhold said liquidated damages from the payments as such damages accrue or, at City's discretion, withhold liquidated damages from any payments due or that may become due under the contract, including retention and final payment.

4. SUBMITTALS

a. General

Within Seven (7) days of the Notice to Proceed, the contractor shall submit to the City for review and approval all items that are specified or reasonably required for the construction, operation and maintenance of the finished work.

b. Payment

All costs for the preparation, correction and delivery of the submittals shall be considered included in various items of work requiring submittals, and no other compensation will be made therefor.

5. PUBLIC CONVENIENCES AND SAFETY

The contractor shall maintain sufficient safeguards against the occurrence of accidents, injuries or damage to any person or property. Barricades shall be placed around all excavations when work is not in progress as directed by the Facilities Project Manager or the Safety Manager. At night, barricades shall be equipped with portable flashing beacons. The contractor shall be solely responsible for all mishaps and their associated costs.

6. SCOPE OF WORK

SUMMARY

a. Submit shop drawings and detail specifications to City Hall Community Development Department, Kurt Danziger, Fire Department—(650) 903-6815, Steve Miller, Public Services, —(650) 903-6246 Eric Anderson, Industrial Waste (650) 903-6225 and David Huang, Facilities —(650) 903-6267 for approval prior to installation. All underground tank removals must be performed under permit from the City. Contact Kurt Danziger for removal permit application. Apply for building permit from City of Mountain View. The permit fee will be paid for by the City.

b. Provide construction barricades, warning tapes and signs for safety.

c. Concrete pad to be 6" thick minimum with 12" deep by 12" wide edges. #5 rebar @12" on center each way. 4" STD. Pipe Guard posts to be concrete filled and painted yellow. 3' above ground and 3' embedded in a 15" diameter 3'-6" deep concrete foundation. Guard posts to be placed 4' maximum or as approved the regulatory agencies. Distance between the posts to the tank to be 5' minimum. Concrete shall have a min. compressive strength of 3000 psi at 28 days. If the requirements from the regulatory agencies are different from the specifications, the most current code requirements will govern.

d. Connect power supply from adjacent irrigation pump station. Provide 1.25" underground conduit and four 15-amp breakers. Provide new power distribution box next to the new tank. Provide 120V, 60 amp, and single-phase power supply to the site. Submit electrical design for approval.

e. Remove and dispose existing tank and dispensers under US EPA, BAAQMD, SCWQCB, OSHA, City of Mountain View Fire Department and all other agencies and regulations. Return the excavated spoils to the tank excavation and compact. If the spoils are not suitable for backfill, legally dispose of the spoils and import class II base rock and compacted to 90% to 16" below grade. Compact backfill in lifts, not to exceed two feet per lift. Spread backfill evenly prior to compaction. Compact the last foot to 95% and install 4" of asphalt to

match surrounding finishes. Provide per ton quote to dispose of clean backfill that cannot be re-placed in excavation. Assume 20 tons in the base bid. Provide per ton quote to dispose of contamination backfill material. Price base on Newby Island disposal. Secure all permits and comply with all current code and regulations including Santa Clara County Health Dept. Soil Testing to be performed by Testing Engineers, Inc 800 660 3142 or an approved lab. Cost of the testing to be included in this contract.

f. The fill material and all construction to comply with the City of Mountain View standards and the California Blue Book.

g. Provide 30" wide galvanized steel steps with handrails to reach the top of the tank. The design shall comply with OSHA standards.

h. Contact USA 5 days prior to excavation; identify all existing underground utilities around the site prior to construction.

i. Furnish and install fuel tank, dispensers and fuel management system as described below:

A. TANK

1.0 GENERAL TANK SPECIFICATIONS

The aboveground tank should be a 2,000-gallon, two-compartment rectangular steel tank. Each section shall have 1,000-gallon capacity. It shall be a HOOVER VAULT TANK® UL listed 2085 or approved equal. It shall have a PROTECTED SECONDARY CONTAINMENT TANK. The dimension to be approximately 11'-10" x 6'-11" x 4'-7" with a 5-gallon spill box at the top. 30 years Tank warranty. The tank shall have a 15 Gal Internal spill containment box with lockable alum. Lid and internal drain with plug. Provide 2" fill limiter valve with drop tube, quick connect and lockable cap.

1.1 The tank shall be a Hoover Vault Tank or an approved equal. It shall be constructed and listed in accordance with Underwriters Laboratories, Inc. Standard 2085 for Insulated Secondary Containment Aboveground Tanks for Flammable and Combustible Liquids, Protected Type. This two-hour fire rating shall exceed all requirements of the National Fire Protection Association, Sections 30 and 30A, for "fire resistant" tanks and meet the requirements of the Uniform Fire Code, Articles 52 and 79, Appendix II-F and Appendix Standard A-II-F-1 for "protected" aboveground tanks.

1.2 The standard model Hoover Vault Tank is constructed as a UL listed secondary containment tank, utilizing steel inner and outer tanks.

1.3 All Vault Tank designs are resistant to bullet penetration according to Appendix II-F of the Uniform Fire Code.

1.4 Lightweight concrete surrounds the primary storage tank and shall be UL listed to allow the detection of leaks from the primary tank.

1.5 The tanks shall have certification from CARB for Phases II Vapor Recovery and II Vapor Recovery.

1.6 The anchoring tie-downs shall be welded to the bottom of the secondary tank and meet Zone 4 seismic requirements.

1.7 The tanks must be off-loaded on-site with a crane.

1.8 All openings shall be from the top with threaded NPT risers.

1.9 The Vault Tank to include a warranty for thirty (30) years.

1.10 Provide safety-warning decals, NFPA cards, dispenser instructions, and all required signage on 2 sides of the tank.

1.11 The tank manufacturer shall provide proof of a minimum five (5) years of manufacturing vault tanks.

2.0 PRIMARY STORAGE TANKS

2.1 The standard primary storage tank shall be rectangular in design. It shall be constructed of UL-specified steel thickness with continuous welds.

2.2 The primary storage tank shall be constructed of ASTM A-569 or A-36 carbon steel or ASTM A-240 Type 304 or 316 stainless steel as required for compatibility of product being stored.

2.3 The primary storage tank shall be constructed and listed in accordance with UL 142 standards.

2.4 The primary tank shall be fitted with: a 4" or 6" fill port, a 2" normal vent port, either a 4", 6", 8" or 10" emergency vent port, a 2" liquid gauging port, a 2" port for dispensing pump, a 4" Phase I vapor recovery port, a 5-gallon spill containment with lockable lid and drain port to the primary tank is required.

2.5 The primary tank shall be pressure tested to UL 142 standard (minimum 3 psi to maximum 5 psi) at the factory and shall be field-tested by the contractor to a maximum 3-psi.

2.6 The primary steel tank shall be designed to store M85 (methanol), alcohol and petroleum blends.

3.0 FIRE PROTECTION

3.1 The standard fire protection material shall be lightweight concrete and surround the primary tank. The tank design shall provide a minimum two (2) hour fire rating per UFC Appendix Standard A-II-F (formerly UFC 79-7) and UL 2085 Protected Secondary Containment Tanks.

3.2 The fire-protective material shall allow liquid leaking from the primary tank to penetrate the material and communicate with the leak detection tube according to UL 2085 Protected Secondary Containment Tanks.

3.3 The fire-protective material shall be of a monolithic pour, poured at the factory.

3.4 The fire-protective material shall provide a minimum of a R-10 insulating factor.

4.0 BULLET RESISTANCE

4.1 The fire protected primary tank shall be tested by a qualified engineering firm to be resistant to penetration of the primary tank by a 150 grain, M 2 bullet, traveling at a velocity of at least 2,700' per second when fired from a .30 caliber rifle located a maximum of 100' from the target.

4.2 The fire-protected tank must be able to be repaired in the field by a factory representative when impacted by a bullet.

4.3 The factory representative must be able to certify that the primary and secondary containment do not leak and that the fire-protective material regains its minimum two (2) hour protection.

5.0 SECONDARY LEAK CONTAINMENT TANK

5.1 The secondary leak containment tank shall be rectangular in design and listed according to UL 2085 insulated secondary aboveground tanks for flammable and combustible liquids, protected type.

5.2 The secondary tank shall be tested liquid tight at the factory (minimum 3 psi to maximum 5 psi) and shall also be field-tested by the contractor to a maximum 3 psi.

5.3 The secondary tank shall provide reinforcement for the lightweight concrete.

5.4 The secondary tank shall provide true 360° radius "pressure testable" containment for the primary tank.

5.5 The secondary tank shall be fitted with: a 2" annular space monitoring tube, a 2" normal vent port and either a 4", 6", 8" or 10" emergency vent port in addition to openings for all ports in the primary tank.

5.6 The port openings in the top of the secondary tank shall be constructed with full welds to prevent moisture from seeping between the fireproofing material and secondary and primary tanks.

5.7 The top of the secondary tank shall be sloped so that water will not accumulate on top of the tank.

5.8 The secondary tank shall have a two-inch (2") monitoring port including a tube which provides a means to detect product leakage from the primary tank into fire protection material that directly surrounds the primary tank. This design shall be listed under UL 2085.

6.0 COATINGS

6.1 The exterior surface of the secondary tank shall be cleansed of foreign material and coated with a corrosion-resistant Macropoxy base coat with Polyurethane top coat (3 to 5 mils dry film thickness).

6.2 The color shall be desert sand.

6.3 An additional fiberglass impregnated coating (FIBERVAULT) shall be applied to the exterior surface of the secondary tank to provide resistance to corrosive environments such as salt-water spray.

6.3.1 the total dry thickness shall be a minimum of 1/8".

6.3.2 All threaded openings and flanges shall be protected during the coating process.

6.3.3 The coating shall be applied only when the work area and the secondary steel tank are between the temperatures of 32ºF and 103º F.

6.3.4 The color of the second coating shall be desert sand.

B. FUEL DISPENSER

Provide two (2) fuel dispensers. Dispensers shall be GasBoy ASTRA model specifically designed for use with aboveground storage tanks; ASTRA conforms to any tank size. ASTRA is uniquely designed for increased accuracy and trouble-free operation. ASTRA eliminates pressurized lines, valves and possible leakage by mounting a separate meter and pumping unit box on top of the tank. Completely electronic, ASTRA features a remote display and nozzle boot that is height-adjustable, mounting directly onto the tank or an optional pedestal. ASTRA is constructed with a heavy-duty commercial, belt-driven gear pump with an integral air eliminator for long-lasting durability. ASTRA is easy to maintain with simple, reliable electronics and the industry's most accurate meter. The remote display and nozzle boot mounts directly onto the tank, or an optional pedestal, for easy user access. The meter and pumping unit cabinet mounts on top of the tank creating a nonpressurized installation.

1. PERFORMANCE

9823A (50 Hz): Up to 18 GPM (68 LPM).

2. FUEL DISPENSER CABINET

Finish: Top, sides, front and back painted white. Black base.
Construction: All exterior panels constructed from carbon steel sheet with a fully alloyed iron-zinc coating on both sides for exceptional corrosion resistance.
Mounting: 5 stainless steel "L" feet slotted for anchor bolts. Adjustable front feet allow box to cantilever over the tank edge.
Provide the "A" model cabinets which have beveled right front corner at hose discharge.

3. METER

Three piston, positive displacement. Tested and calibrated for accuracy at any speed or pressure.

4. PULSER

Dual phase 10:1 with error detection.

5. PUMPING UNIT

Heavy-duty, belt-driven gear pump. Air eliminator built into pump casting.

6. MOTOR

1/2 HP continuous duty.

7. POWER REQUIREMENTS

120VAC, 60 Hz.

8. INLET

1-1/2" (3.8 cm) NPT rear inlet.

9. DISCHARGE

Front hose discharge. 9823A: 1" (2.5 cm).

10. WORKING PRESSURE

50 PSI maximum.

11. DIMENSIONS

29" W x 23.5" H x 21.5" D.
(74 cm x 60 cm x 55 cm)

12, FILTER

Provide internal filter option “F”.

13. INTERNAL FILTER ADAPTER ("F")

Provides adapter inside the cabinet for a filter element to help ensure product purity, high flow (9823A). Standard, hydrosorb or methanol filter elements must be specified.

14. SLOWDOWN VALVE ("PP")

Reduces delivery to a slow flow for accurate preset shut-off by fuel control systems. 9823A: 1" (2.5 cm).

15. VAPOR RECOVERY—INTERNAL SPLITTER ("V")

Provides internal splitter for vapor recovery applications. Nozzle boot fits short vapor recovery nozzles only. Provide vapor recovery applications for unleaded fuel dispensers only. Provide ability to convert for Phase 1 diesel on the diesel pump.

16. ACCESSORIES

Note: The accessory part number is shown in parentheses after the accessory name or in the description if there are multiple options.

17. HOSE for unleaded fuel: 12′ long or longest allowed by code. Provide 9822A ¾″ Vapor recovery hose

18. HOSE for diesel

9822A: ¾″ 22′ in length

19. HIGH HOSE RETRACTOR

Provide high hose retractor for diesel fuel. Post-mounted retractor with enclosed spring return reel. Keeps hose out of vehicle lane when idle and eases hose handling during fueling. Allows use of longer hose.

20. MECHANICAL TOTALIZER (025934)

Mechanical non-resettable totalizer. Reads up to 9999999.9.

21. VAPOR RECOVERY COMPLETE (048519)

Includes nozzle, swivel, breakaway and high hose retriever. Balance system. Requires "V" option.

22. REMOTE REGISTER AND NOZZLE BOOT

23. CABINET

Finish: Top, sides and back painted black urethane.
Front covered with acrylic blue and white graphic overlay. Construction: Carbon steel panels.
Mounting: Four weld bolts in rear.

24. REGISTER

Volume only (gallons) front display. 1" (2.5 cm) backlighted LCD display. Maximum 999.000 gallons .

25. TOTALIZER

Displayed on LCD by magnetic switch activation.

Reads up to 999999. Battery-backed.

26. NOZZLE BOOT

Front mount. Flips up to activate pump.

27. POWER REQUIREMENTS

120 VAC, 60 Hz 240 VAC ("2" suffix)

28. DIMENSIONS

17.5" W x 22" H x 12" D.
(44 cm x 56 cm x 30 cm)

29. CABLE (CO8864)

Connects meter and pumping unit to remote register.
Shielded, 4-conductor, 18 awg. Specify length.

30. CARD SYSTEM INTERFACE—CFN (CO6468)

RS485 interface for direct connection to GasBoy CFN System.

31. CARD SYSTEM INTERFACE—PULSE OUTPUT
(C06467)

Selectable pulse/gallon outputs for interfacing with Series 1000 and other fuel control systems. 1, 10, 250, 500 or 1,000 pulses per gallon.

32. MOUNTING KITS

Standalone Pedestal (042082): Mounts with anchor bolts to tank pad. Black urethane finish.

33. BID ALTERNATE

Bid alternate: provide another type of fuel dispensing equipments as alternate. It can be factory installed top mount packages for diesel and Phase II vapor recovery equipment package.

C. FUEL MANAGEMENT SYSTEM

TOPKAT FUEL MANAGEMENT SYSTEM

Encoder included. Fuel access control system with employee, vehicle and departmental fuel usage reports. Mounts above ASTRA remote register with pedestal using TopKAT Mounting Kit. Use either the smart key reader or the keypad, or a combination of both, to initiate fueling transactions. Vehicle, employee and department information is maintained in the system memory so it can be easily changed at any time. Provide a PCMCIA card provides a simple and reliable means for backing up and restoring system files.

TopKAT shall be in a "plug-'n-play" configuration, factory-mounted directly on the ASTRA unit. Add the built-in report printer to receive cumulative vehicle, employee, department and MPG reports right at the fueling island.

1. SOFTWARE

Provide GasBoy PCS050, PCS023 and PCS024 PC /TopKAT for Windows software.

2. ACCESS METHODS (owner-configured)

- Vehicle key, vehicle code entered via keypad, both.
- With key or code, you can have an optional ID field entered via keypad.

3. SYSTEM PARAMETERS

- Handles up to 2,000 vehicles.
- Handles up to 4,000 employees+.
- Stores up to 1,650 transactions
- Provides entry/editing of system files via keypad and display, or remotely via terminal/PC.
- Allows up to eight TopKATs to be networked at the same site (one master/ seven satellites)
  +Note: Employee # is manually entered via keypad; may instead be set up for accounts, jobs, etc.

4. SYSTEM CONTROLS

- Key-encoded unique system ID.
- Vehicle or employee PIN.
- Vehicle and employee lockout.
- Fuel type restriction by vehicle.
- Fill limit per transaction by vehicle.
- Maximum fuelings per day by vehicle.

- Odometer entries checked against last odometer stored on key for reasonability.
- Manager password protection.

5. KEY TYPES

- Vehicle++—references vehicle look-up file, prompts for employee file number (blocks of preencoded vehicle keys may be ordered or encode at TopKAT).
- Supervisor—prompts for vehicle and employee file numbers.
- Delivery—prompts for inventory delivery amount, adds to inventory.
- Dipstick—prompts for dipstick reading, creates dipstick transaction.
- Manager—allows access to reports, file editing, and diagnostics and back up and restore.
- Report—allows access to reports only.
  ++Note: Vehicle code entry via the keypad may be used in place of a vehicle key if desired.

6. TRANSACTION DATA RECORDED

- Site number.
- Transaction number.
- Vehicle key number.
- Vehicle number.
- Vehicle department/account number.
- Employee number.
- Employee department number.
- Pump, product and tank numbers.
- Date and time.
- Transaction quantity.
- Vehicle cumulative quantity.
- Employee cumulative quantity.
- Odometer.
- Miles/kilometers between fuelings.
- Error code.

7. SYSTEM REPORTS

- Department/Account Vehicle Report.

  — Reports vehicle, department or account and grand total fuel usage; last odometer or hour meter; distance (miles/kilometers) or hours traveled; and fuel efficiency (MPG, HPG, L/100KM, LPH, KM/L or HPL) for current time period.

- Vehicle Report.
  - Lists vehicle file data, plus beginning and ending odometers; maximum and current fuelings per day; cumulative fuelings; and quantity per current time period.
- Department Employee Report.
  - Reports employee and department fuel usage for current time period.
- Employee Report.
  - Lists employee and department numbers, lockout status, PIN, cumulative fuelings and quantity per current time period.
- Inventory Report.
  - Lists tank number, product code, current quantity, last delivery amount and date.
- Pump Report.
  - Lists pump and tank numbers, product code, cumulative pump totalizer and reset date.
- Lockout Reports.
  - Lists locked out vehicles and employees.
- System Configuration Report.
  - Prints system parameters.
- Date and Time Report.
  - Prints current date and time.

8. HARDWARE FEATURES DIMENSIONS

- Head: 15"w x 10"h x 17"d (38 cm x 25 cm x 43 cm).
- With Square Pedestal: 59 1/2" h (151.1 cm); 12 1/2" x 12 3/4" (31.8 cm x 32.4 cm) base.

9. POWER AND ENVIRONMENTAL REQUIREMENTS

- 115VAC±10%, 47-63 Hz.; optional 230VAC.
- 30°C to 50°C; 95% relative humidity, noncondensing.

10. DATA ENTRY AND INSTRUCTIONS

- 2 line x 20 character, backlit LCD.
- 4x4 weather-proof membrane keypad with audible feedback.
- Read/write key receptacle.

11. COMMUNICATION PORTS

- Two RS232/RS422 ports are provided for communication with a remote terminal, printer, modem or PC. One RS232/RS422 port and a second RS232/RS422 port or internal modem. Due to wiring limitations in the pump junction box, the following exceptions apply to pump-mounted TopKATs:

  – TopKAT is pump-mounted or one RS422 port and internal modem.

  – TopKAT is pump-mounted and controls multiple pumps or is a Master TopKAT: One RS422 port or an internal modem.

12. HARDWARE

- Internal 9600 baud phone modems.

- PCMCIA card for data back-up and restore.

- Smart keys (individual blank keys or packages of 50 preencoded keys with consecutive key numbers).

13. ASTRA Series:

For mounting on ASTRA pedestal.

14. TPK-900-R 1-8 hoses mount on ASTRA pedestal (with mounting bracket).

15. Provide a ¾" underground conduit connecting the ASTRA and the PC (provided by the City) PC to be located in the pump station office near the power supply panels.

16. WARRANTY

Products must be installed by a qualified installer and used in conformance with all building, fire and environmental codes and other safety requirements applicable to

their installation and use, including, but not limited to, NFPA 30, NFPA 30A and NFPA 70. This product is only part of a fuel dispensing system and additional equipment and accessories, such as, but not limited to, breakaway connectors, shear valves, pressure regulators and other safety devices, may be necessary to meet the applicable codes. Qualified installers shall be familiar with fuel system installations under the above-stated building, fire and environmental codes and other safety requirements required for the particular type of installation

D. STEEL CANOPY

Provide design, structural calculations, secure building permits for a 24′ x 34′ steel canopy. The canopy shall have a 36″ high fascia, 14′-6″ minimum clearance, with 2 10″x10″x1/4″ steel posts. Each post shall have a 4′x4′x6.5′ foundation. The metal parts to be galvanized, primed and powder coated. Color to be selected by the Owner. Provide lighting system with timer and motion sensor switches. Lighting design to be approved by the regulatory agencies. Canopy to be design and installed by Rankin and Rankin (916 782-9001) or Ghirosho or approved equal.
Provide complete automatic sprinkler system with water supply from near by source. Fuel vent may go through the center post.

E. OIL-WATER SEPARATOR

Pre-engineered Surface Drain Forming System

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work includes:
1. Furnish all labor, materials, tools, equipment, and services for all surfaces drain systems indicated, in accord with provisions of Contract Documents.
2. Completely coordinate with work of all other trades.
3. Although such work is not specifically indicated, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to, or necessary for sound, secure and complete installation.

1.02 SYSTEM

A. Description:
1. System of pre-engineered, cast-in-place concrete forming components for forming subsurface drainage trenches, catch basins and utility chases.
2. Forming: consist of non-CFC, EPS (expanded polystyrene) forms, embedded steel inlay rails with no-float legs, and grates.

B. Location of work: As indicated.

1.03 REFERENCES AND QUALITY ASSURANCE

A. References:
1. Ductile iron: ASTM A 536-84(1993).
2. Grey iron: ASTM A 48-93a
3. Galvanizing: ASTM A123-89a
4. Steel: ASTM A 36/A36M-93a

B. Design criteria: Gratings and covers to withstand loadings of:
EXTRA HEAVY DUTY - 8000-16000 LB wheel load; Load class over 8.

C. Installer qualifications:
1. Use only persons thoroughly familiar with manufacturer's installation requirements.

D. Testing agency qualifications:
1. Independent laboratory listed in National Directory of approved testing laboratories.

E. Source quality control:
1. Manufacturer must have continuing in-house quality control system to assure highest standards of quality.

F. Allowable tolerances:
1. Setting plus/minus 1.5mm (1/16 IN)

1.04 SUBMITTALS

A. Shop drawings:
1. Indicating layout of system with connections and accessories.

B. Product data:
1. Proving substituted items comply with specified requirements.

C. Samples:
1. Of substituted items for comparison.

D. Project information:
1. Test reports. Proving compliance with specified attributes.

E. Project closeout data:
1. Operating and maintenance data. Regarding requirements for periodic inspection of system.
2. Warranty: That materials remain free from manufacturing defects for one year from date of substantial completion.
3. Drawings showing as-constructed system with locations of all connectors and catch basins.

1.05 DELIVERY, STORAGE AND HANDLING

A. Perform in manner to preclude damage to components and surroundings..

1.06 JOB CONDITIONS

A. Existing conditions:
1. Verify that base, to receive system, has been compacted to Division 2 Requirements.

B. Environmental requirements:
1. Assure that all EPS pieces and other scrap are properly disposed of.

C. Protection:
1. Assure installed system is protected from damage, from other operations.
2. Allow EPS forms to remain in place to avoid open trenches as long as possible.

D. Sequencing:
1. Assure that trench rails are coplanar to within 1.5 mm (1/16 IN) prior to placing of surrounding paving.

1.07 WARRANTY

A. Written warranty:
1. Signed jointly by installer, manufacturer and Contractor.
2. Warrant installation for a period of one year from date of Substantial Completion.

PART 2 - PRODUCTS

A. Acceptable manufacturers:
1. Surface drain system:
a. Base: Trench Former TF-14: manufactured by ABT Inc, PO Box 837, 259 Murdock Rd. Troutman, NC 28166; 1-800-438-6057.
b. Optional: Field formed system which meets specified requirements.
c. Other manufacturers desiring approval comply with requirements of bid and Contract Documents.

B. Components:
1. Forming system: Pre-manufactured; non-floating, fabricated of Non-CFC, EPS foam.
2. TF-14 is the stock system; consisting of 2.4 M (8 FT) pre-sloped form segments, the 19 stock segments can create a continuous 46 M (152 FT) trench.
3. Each segment has a built-in 10.4mm / M(1/8 IN / FT) slope of 1.04%, with 305mm (12 IN) wide trench with radius bottom and 356mm (14 IN) grate seat area.
4. Six, non-sloping 1.2 M (4 FT) long forms, can be used to extend run.
5. Steel components: 2.4 M (8 FT), angle rails with anchoring studs, welded on 280mm (11 IN) centers; and three 12mm (1/2 IN) threaded, U-shaped, no-float legs attached to each rail; pre-fabricated L & T rail assemblies for 90deg

turns at any location.

6. Outlet piping: butted to annular grooves in EPS form prior to concreting.
7. Catch basins:
   a. 1900 series, 350mm (14 IN) wide x 610mm (24 IN) long x 915mm (36 IN) or 610mm (24 IN) deep.
   c. Catch basin grate: cast iron 585 x 610 x 38mm (23 x 24 x 1 1/2 IN).
8. Rail alignment clips: 1200 series.
9. Grate locking devices: 1800 series.
10. Form release: Non-petroleum based, which will not attack EPS.

11. Gratings:
    Slotted, cast iron, load class 15.8.

2.02 MIXES

A. Concrete mixes as 6 sag ¾" aggregates, 3500 psi minimum

PART 3 - EXECUTION

3.01 INSPECTION

A. Assure substrate is level to within 1 in 1000.

3.02 PREPARATION

A. Assure substrate is compacted to 95% density.

3.03 INSTALLATION

A. In accord with manufacturer's instructions, utilizing manufacturer's approved installation aids. Connect 4" drainpipe to the storm drain main.

3.04 FIELD QUALITY CONTROL

A. Assure that units are installed so drain slopes are correct and that units align with adjacent paving.

3.05 CLEANING

A. Remove EPS forming materials and properly dispose of.

B. Leave system and surrounding area ready to receive concreting; remove form materials after concrete is sufficiently cured.

C. Leave system and surrounding area broom clean.

F. EXCAVATING, BACKFILLING AND COMPACTING

PART 1 GENERAL

1.01 SUMMARY

A. Excavate, backfill, compact and grade the site to the elevations shown on the Drawings, as specified herein, and as needed to meet the requirements of the construction shown in the Contract Documents.

PART 2 PRODUCTS

2.01 SOIL MATERIALS

A. Fill and backfill materials:

1. Provide soil materials free from organic matter and deleterious substances, containing no rocks or lumps over 3 inches in greatest dimension.

Backfill material shall be "lightweight" type having a compacted moist unit weight of 90 pounds to 110 pounds per cubic foot. Such materials shall be granular in nature, alluvial or lightweight crushed soft bedrock such as Monterey formation bedrock, with the gradation shown below, free of organic materials, with a plasticity index of less than 12 and an expansion index of less than 20.

Sieve Size	Percent Passing
6"	100
No. 4	60 to 100
No. 200	Less than 20

Backfill shall be compacted to a maximum dry density of 90 – 95 percent.

Backfill material shall comply with the Santa Clara Valley Water District excavation backfilling well standard implementation draft guidance and standards for construction of destruction of wells and other deep excavations in Santa Clara County.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 PROCEDURES

A. Utilities:

1. Protect active utility lines. If damaged, repair or replace at no additional cost to the Owner.
2. If existing utilities are found to interfere with the permanent facilities being constructed, immediately notify the Owner and secure his instructions.

3.03 EXCAVATING

A. Perform excavating as required within the limits of the Work to the lines, grades and elevations as specified on the Drawings and as indicated herein.

B. Excavate topsoil and stockpile in area designated on site.

C. Excavate subsoil required for building foundations, construction operations and other Work.

D. Dispose of unsatisfactory excavated material away from the site at disposal areas arranged and paid for by the Contractor.

E. Slope banks to angle of repose or less, until shored.

F. Where rocks, boulders, granite or similar material is encountered, remove such material by means which will neither cause additional cost to the Owner nor endanger buildings or structures on or off the site.

G. Excavate and backfill in a manner and sequence that will provide proper drainage at all times.

H. Correct unauthorized excavation at no additional cost to the Owner.

3.04 TOLERANCES

A. Conform to elevations and dimensions shown within a tolerance of 0.10 feet, and extending a sufficient distance from footings and foundations to permit placing and removing concrete formwork, other required construction and inspection.

B. In excavating for footings and foundations, take care not to disturb bottom of excavation.

3.05 FILLING AND BACKFILLING

A. Backfill excavations as promptly as progress of the Work permits, but not until completion of the following:

1. Acceptance of construction below finish grade.
2. Removing concrete formwork.
3. Inspecting, testing and approving underground utilities.
4. Removing of trash and debris.
5. Placement of horizontal bracing on horizontally supported walls.

B. Placing and compacting.

1. Do not place backfill or fill material on surfaces that are muddy frozen or containing frost or ice.
2. Place backfill or fill material evenly adjacent to structures, to required elevations.
3. Employ a placement method so as not to disturb or damage foundations, foundation damp-proofing or utilities in trenches.
4. Back fill material depth to be 10” minimum.

3.06 MAINTENANCE

A. Protect newly graded areas from traffic and erosion, and keep free from trash and weeds.

B. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape and compact prior to further construction.

G. CONCRETE REINFORCEMENT

1.01 SUMMARY

A. Provide concrete reinforcement where shown on the Drawings, as specified herein and as needed for a complete and proper installation.

1.02 REFERENCES

A. ASTM A615-89: Standard Specification for Deformed and Plain Bars for Concrete Reinforcement.

B. ASTM A775/A775M-91b: Standard Specification for Epoxy Coated Reinforcing Steel Bars.

1.03 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Perform concrete reinforcement work in accordance with ACI 301, unless otherwise specified in this Section.

PART 2 PRODUCTS

2.01 REINFORCEMENT MATERIALS AND ACCESSORIES

A. Bars: Deformed billet steel bars, ASTM A615; grade 60.

B. Epoxy Coated Bars: Deformed billet steel bars coated in accordance with ASTM A775.

B. Steel wire: For tie wire use black annealed steel, 16 gage minimum.

C. Welded wire fabric: Welded steel, ASTM A185; plain type in coiled rolls; plain finish.

D. Fibrous reinforcement: 100% virgin polypropylene, fibrillated fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement. Volume per cubic yard shall equal a minimum of 1.5 pounds.

2.02 FABRICATION

A. Fabricate reinforcing bars to conform to the required shapes and dimensions.

B. Place reinforcement, supported and secured against displacement.

C. Ensure reinforcing is clean, free of loose scale, dirt or other foreign coatings.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 FABRICATION

A. Fabricate reinforcing bars to conform to the required shapes and dimensions.

B. Place reinforcement, supported and secured against displacement.

C. Ensure reinforcing is clean, free of loose scale, dirt or other foreign coatings.

3.03 INSTALLATION

A. Locate and support reinforcement by metal chairs, runners, bolsters, spacers and hangers as required.

B. Place reinforcement to obtain minimum coverage for concrete protection.

C. Arrange, space and securely tie bars and bar supports together with the specified tie wire.

D. Set wire ties so twisted ends are directed away from exposed concrete surfaces.

E. Install welded wire fabric in as long lengths as practicable, lapping adjoining pieces at least one full mesh.

F. Provide sufficient numbers of supports, and of strength to carry the reinforcement.

3.04 SPLICES

A. Lap splices: Ties securely with the specified wire to prevent displacement of splices during placement of concrete.

H. CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SUMMARY

A. Provide cast-in-place concrete where shown on the Drawings, as specified herein and as needed for a complete and proper installation.

1.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Perform cast-in-place concrete work in accordance with ACI 301, unless specified otherwise in this Section.

PART 2 PRODUCTS

2.01 CEMENT

A. Provide a standard brand of Portland cement, ASTM C150, type I or II.

2.02 AGGREGATES

A. General: Provide hardrock aggregate, ASTM C33, with additional attributes as specified herein.

B. Fine aggregate: Provide washed natural sand having strong, hard, durable particles, and containing not more than 2 percent by weight of deleterious matter such as clay lumps, mica, shale or schist. Grade from coarse to fine.

C. Coarse aggregate:

1. Provide coarse aggregate consisting of clean, hard, fine-grained, sound crushed rock or washed gravel, or a combination of both, containing not more than 5 percent by weight

of flat, chip-like, thin, elongated, friable or laminated pieces, nor more than 2 percent by weight of shale or cherty material.

2. Use coarse aggregate of the largest practicable size for each condition of placement.

2.03 WATER

A. Use only clean potable water.

2.04 CONCRETE MIXES

A. Unless otherwise directed use Portland cement to achieve a weight of not more than 110 pcf and an ultimate compressive strength of 3500 psi at 28 days.

B. Slump: Footings and slabs on grade: 3 inches.
All other concrete: 4 inches.

2.05 OTHER MATERIALS

A. Expansion joint filler: Use preformed strips, non-extruding and resilient bituminous type, of thickness indicated, ASTM D1751.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 CONCRETE MIXING

A. Concrete for minor work may be mixed at the site in a power mixer when the mixer has a capacity not less than one full sack batch.

B. Unless otherwise approved by the Owner, use ready mixed concrete complying with ASTM C94.

3.03 INSERTS AND EMBEDDED ITEMS

A. Coordinate the various trades who are required to fasten work to the structure, or are required to insert therein any sleeve, box, bolt, anchor or other rough hardware.

B. Provide every facility for setting all required items accurately in the forms.

C. Conduits and sleeves:

1. Locate so as not to reduce the strength of construction. Do not place pipes, except conduits, in slabs less than 3-1/2 inches in thickness.

2. In placing conduits in slabs on earth, place below the reinforcement and encase in concrete by increasing the thickness of the slab locally to at least 3 inches of concrete around the conduit on all sides.

3.04 CONVEYING AND PLACING CONCRETE

A. Before placing concrete, thoroughly clean forms and make tight.

B. Do not place concrete until reinforcement, conduits, outlet boxes, anchors, sleeves, hangers, bolts and other embedded materials are securely and properly fastened in their correct positions.

C. Prepare previously prepared concrete by cleaning with steel brush and applying bonding agent. Apply bonding agent in strict accordance with manufacturer's instructions.

D. Install vapor barrier under interior slabs-on-grade. Lap joints a minimum of 6 inches and seal watertight. Repair damaged vapor barrier with vapor barrier material lapped over damaged areas a minimum of 6 inches and sealed watertight.

E. Separate slabs-on-grade from vertical surfaces with joint filler, extended from bottom of slab to within 1/4 inch of finished slab surface.

F. Place concrete continuously between predetermined expansion, control and construction joints.

G. Where new concrete is dowelled to existing work, drill holes in existing work, insert steel dowels and pack with non-shrink grout.

H. Screed floors, slabs-on-grade and concrete base for toppings level, maintain surface flatness of maximum 1/8 inch in 10 feet.

I. Thoroughly work concrete around reinforcement and embedded fixtures and into corners of forms during placing operations.

J. Completely compact with tamping poles and by tapping forms until the concrete is thoroughly compact and without voids.

3.05 CURING

A. Immediately after placement, protect concrete with wet fabric material from premature drying.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for a period necessary for hydration of cement and hardening of concrete.

7.0 PERMITS AND INSPECTIONS

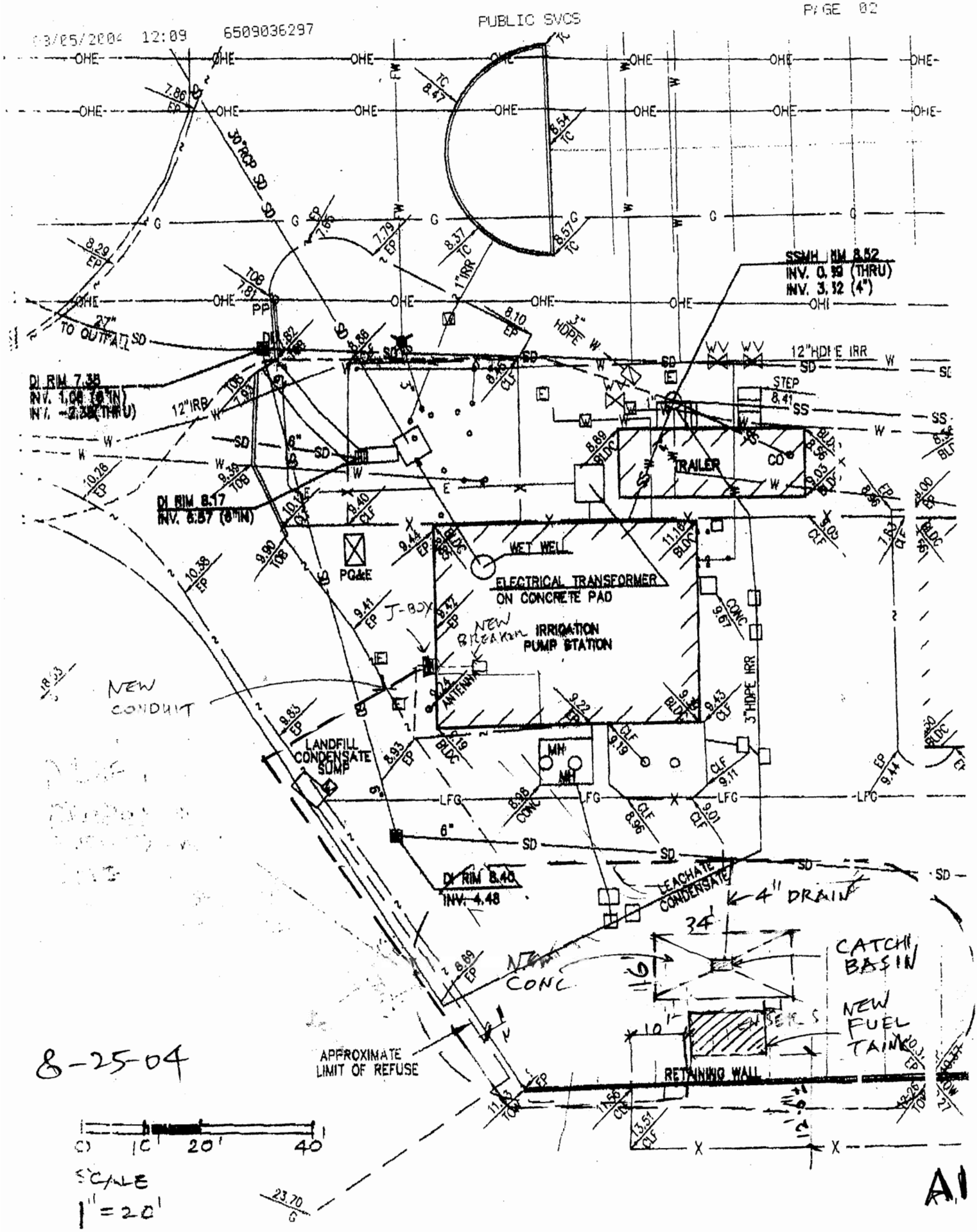
The contractor shall furnish all licenses and permits and shall arrange for and make all inspections and tests required thereby for the tank and dispenser installation. Submit shop drawing and secure approval from City of Mountain View Fire Department prior to installation.

8.0 TESTING AND OPERATION MANUAL

Schedule a test run with the City staff, provide training to City staff. Submit three (3) copies of the operation manual to City Facilities Project Manager.

End of Specs.

DH/9/PSD
772-08-12-04S^


SSMH RIM 8.52
INV. 0.99 (THRU)
INV. 3.12 (4")
DI RIM 7.38
INV. 1.08 (8"IN)
INV. -2.38 (THRU)
DI RIM 8.17
INV. 6.57 (8"IN)
DI RIM 8.40
INV. 4.48
TRAILER
WET WELL
ELECTRICAL TRANSFORMER
ON CONCRETE PAD
IRRIGATION
PUMP STATION
PG&E
J-BOX
NEW
CONDUIT
LANDFILL
CONDENSATE
SUMP
LEACHATE
CONDENSATE
4" DRAIN
CATCH
BASIN
NEW
CONC
NEW
FUEL
TANK
RETAINING WALL
APPROXIMATE
LIMIT OF REFUSE
30"RCP SD
27" TO OUTFALL SD
12"HDPE IRR
3" HDPE W
3"HDPE IRR
STEP
LFG
SD
SS
W
OHE
8-25-04
SCALE
1" = 20'
A1

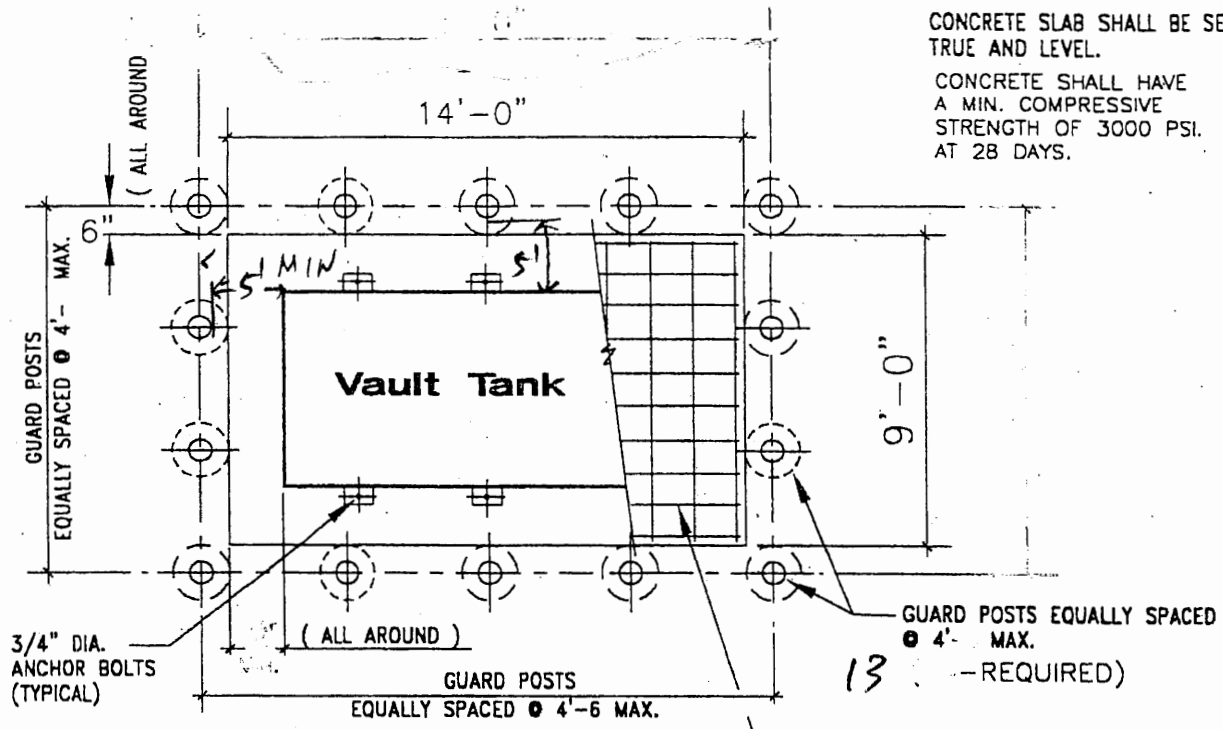
MODIFY TO ACCOMMODATE STEPS WHEN REQUIRED

NOTES:

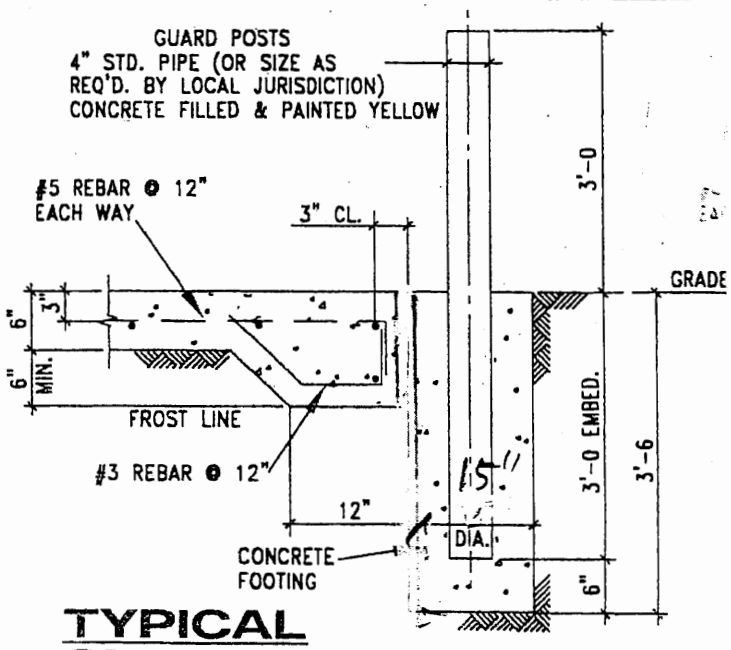
VERIFY SLAB SIZE WITH TANK DRAWING PRIOR TO CONSTRUCTION.

CONCRETE SLAB SHALL BE SET TRUE AND LEVEL.

CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 PSI. AT 28 DAYS.



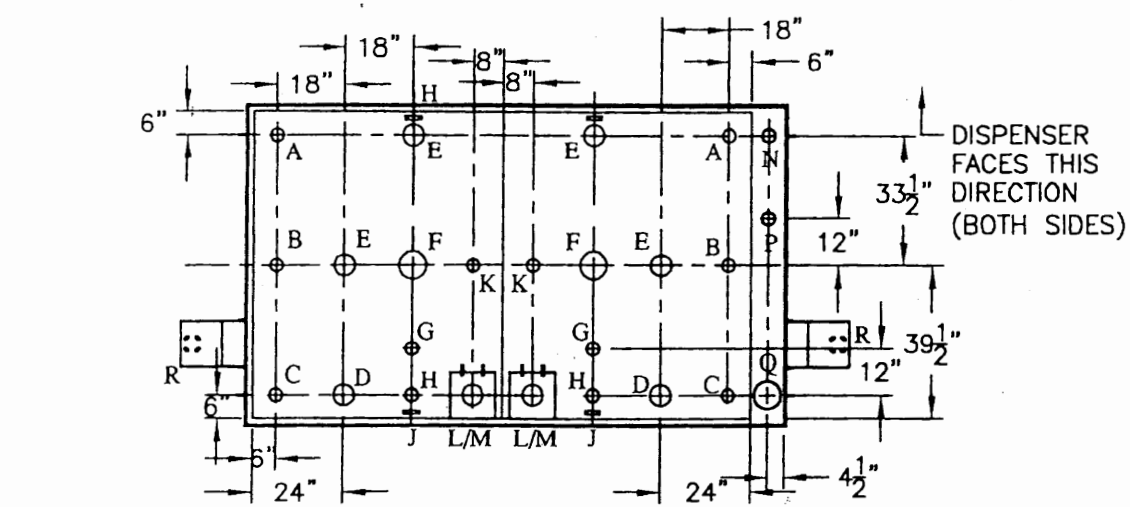
FOUNDATION PLAN



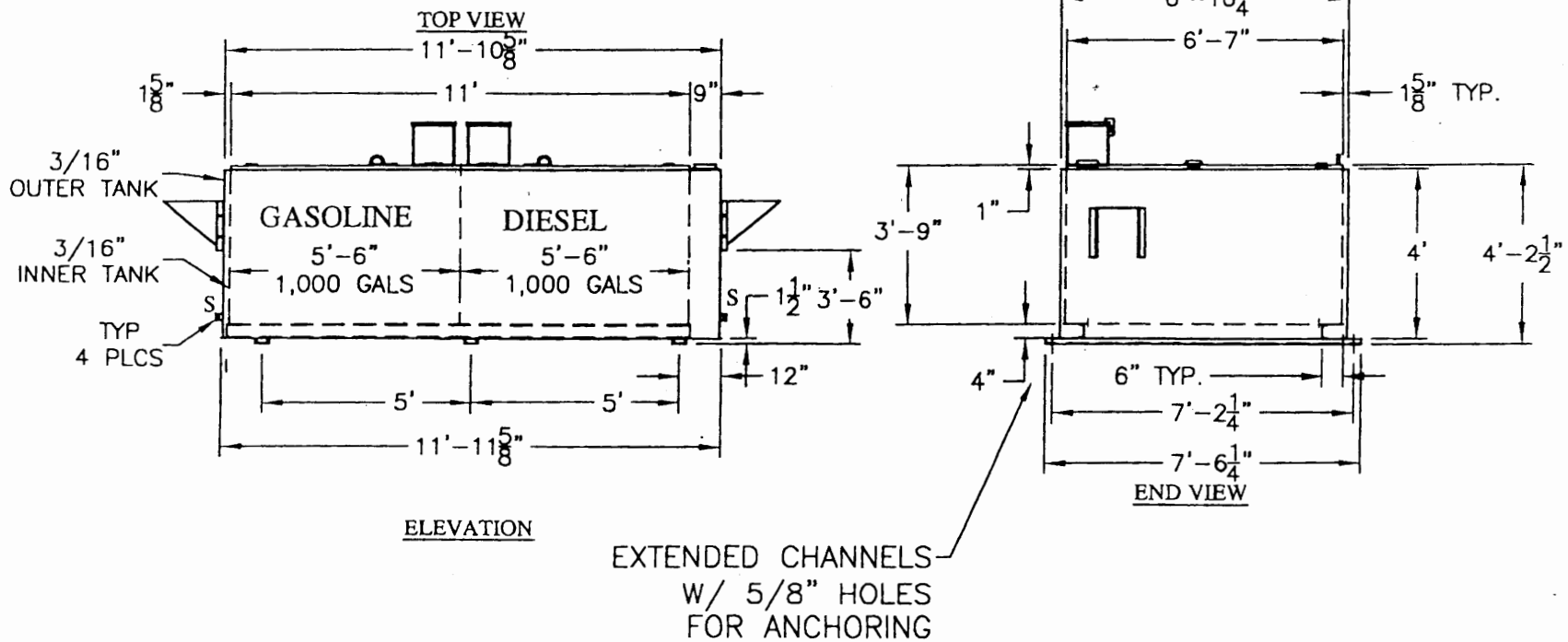
TYPICAL GUARD POST

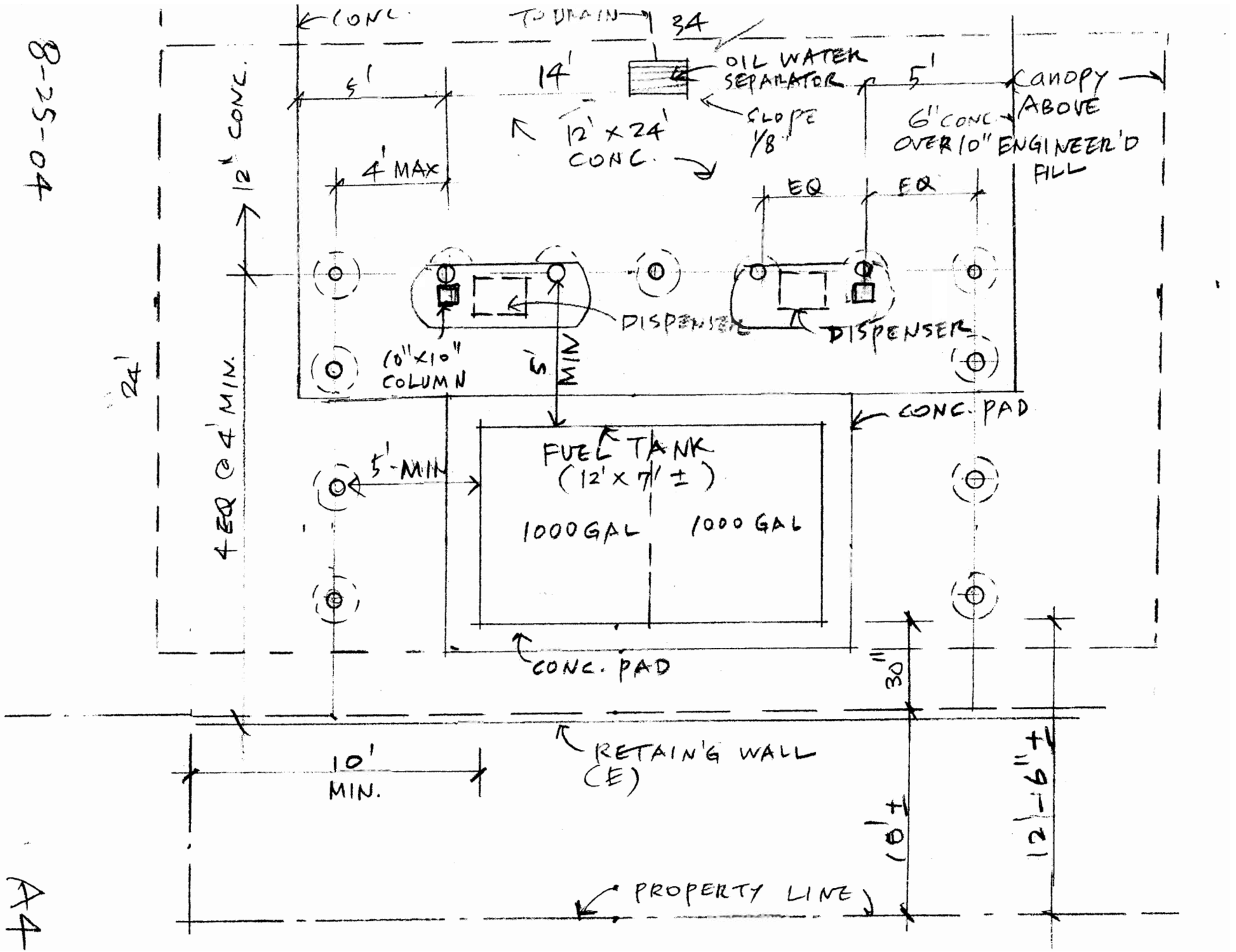
8-25-04

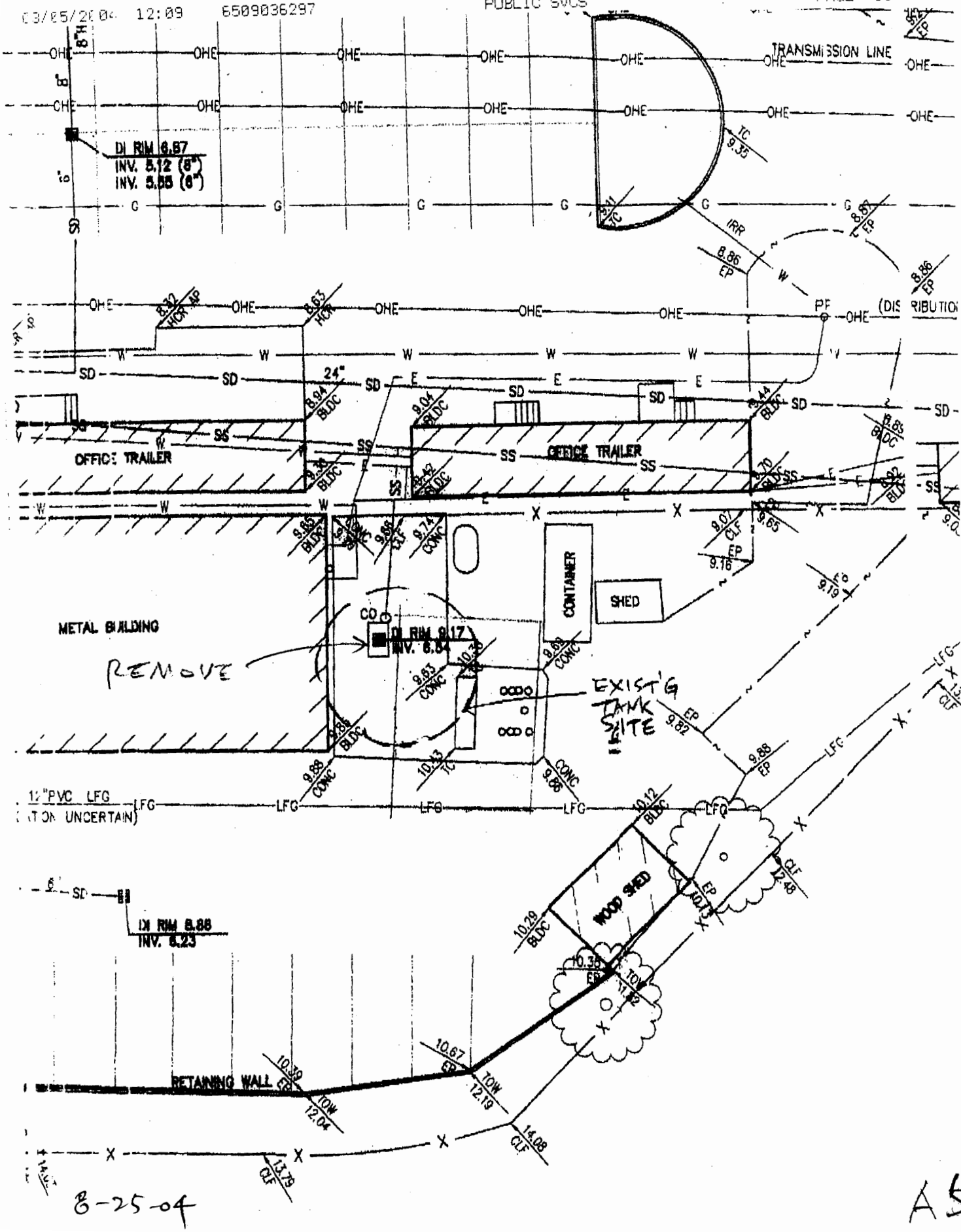
A2

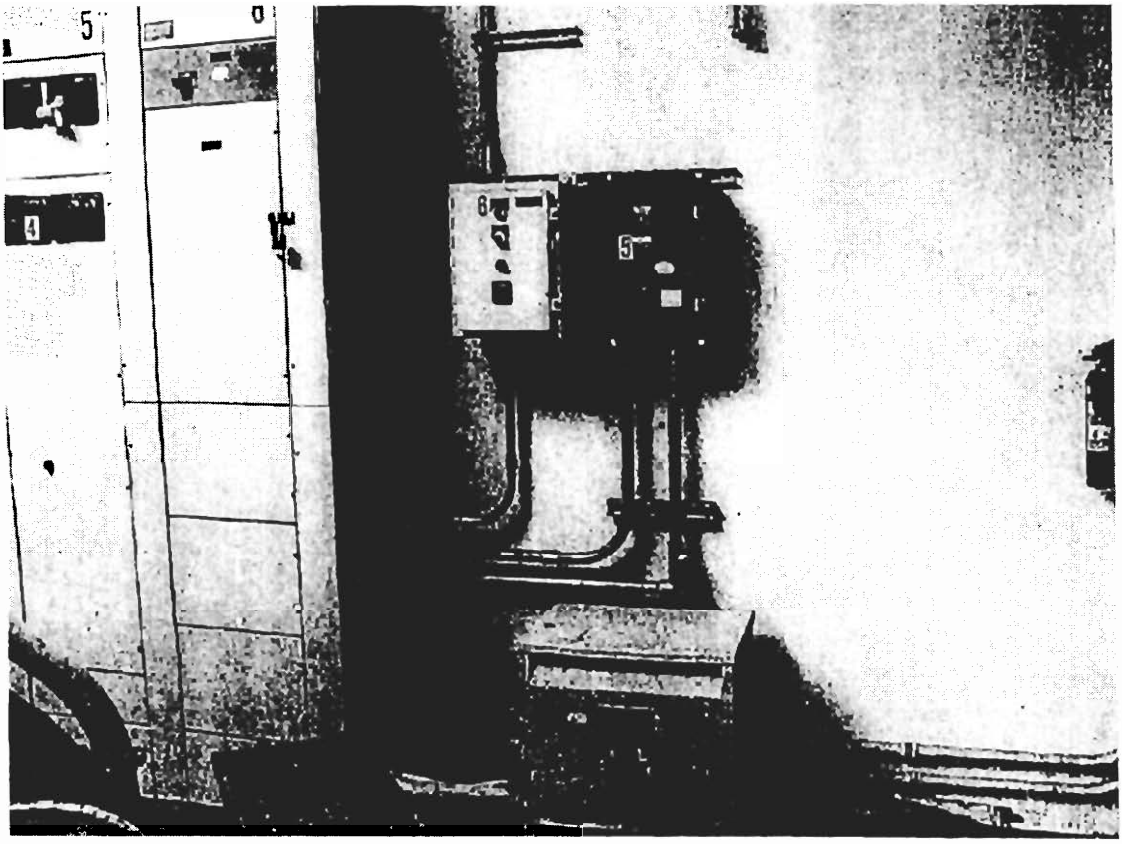


ITEM	SIZE	FUNCTION
A	2"	SPARE
B	2"	PUMP
C	2"	SPARE
D	4"	VAPOR RECOVERY/SPARE
E	4"	SPARE
F	6"	PRIMARY TANK EMERGENCY VENT
G	2"	GAUGE
H	2"	STICK PORT
J	SMALL	LIFTING LUG (TYP. 4 PLCS.)
K	2"	PRIMARY WORKING VENT
L	4"	FILL
M	7 GAL.	SPILLBOX W/ 1" NPT DRAIN
N	2"	SECONDARY WORKING VENT
P	2"	MONITORING PORT/SPARE
Q	6"	SECONDARY CONTAINMENT EMERGENCY VENT
R	PBB001	DISPENSER BRACKET FOR FILL RITE 305
S	MCB004	GROUNDING CLIP




8-25-04
A4
CONC.
TO DRAIN
34
OIL WATER SEPARATOR
14'
5'
5'
CANOPY ABOVE
SLOPE 1/8"
12' x 24' CONC.
6" CONC OVER 10" ENGINEER'D FILL
4' MAX
12' CONC.
EQ
EQ
DISPENSER
DISPENSER
10"x10" COLUMN
5' MIN
24'
4 EQ @ 4' MIN.
CONC. PAD
FUEL TANK (12' x 7' ±)
5'-MIN
1000 GAL
1000 GAL
CONC. PAD
30"
RETAIN'G WALL (E)
10' MIN.
(10' ±)
12'-6" ±
PROPERTY LINE


TRANSMISSION LINE
DI RIM 6.87
INV. 5.12 (8")
INV. 5.55 (8")
OFFICE TRAILER
OFFICE TRAILER
CONTAINER
SHED
METAL BUILDING
REMOVE
CO
DI RIM 9.17
INV. 6.84
EXIST'G TANK SITE
12"PVC LFG (LOCATION UNCERTAIN)
WOOD SHED
RETAINING WALL
DI RIM 8.66
INV. 6.23
8-25-04
A5



A6